

Claim Amendments:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. – 9. (Canceled)

10. (Previously Presented) An apparatus for protecting a protruding component comprising:
a housing part to which the protruding component is connected,
an impact detection element movably connected to the housing part,
a light source coupled to the housing part defining an emission surface, and
a receiving element coupled to the impact detection element defining a receiving surface arranged opposite the emission surface of the light source.

11. (Original) The apparatus according to claim 10, wherein the receiving surface and emission surface are of substantially the same size.

12. (Previously Presented) The apparatus according to claim 10, wherein the impact detection element surrounds at least partially the protruding component to be protected.

13. (Previously Presented) The apparatus according to claim 10, wherein the light source comprises at least one light-guiding fiber, and the emission surface is defined by the end of the light-guiding fiber.

14. (Original) The apparatus according to claim 10, further comprising an intensity sensor, which is associated with the receiving surface.

15. (Original) The apparatus according to claim 10, wherein the receiving surface is a reflective surface that directs the light emitted from the emission surface onto at least one further light-guiding fiber, connected to an intensity sensor, whose end defines a further receiving surface.

16. (Original) The apparatus according to claim 10, wherein the impact detection element is movably connected to the housing part via at least one elastically bendable rod.

17. (Currently Amended) The apparatus according to claim 14, wherein the intensity sensor generates an electrical signal corresponding to the power level of the light striking the receiving surface, which serves for [[the]] open-loop or closed-loop control or monitoring of a movement operation.

18. – 21. (Canceled)

22. (Previously Presented) The apparatus according to claim 10, wherein a light path between the receiving surface and the emission surface is smaller than a cross section of the emission surface.

23. (Canceled)

24. (Currently Amended) ~~[[The]] A contact sensor according to claim 1,~~
comprising:

an impact detection element movably connected to a housing part,
a light source coupled to the housing part defining an emission surface, and
a receiving element coupled to the impact detection element defining a receiving surface arranged opposite the emission surface of the light source,

wherein the sensor is configured so that, during a non-collision, light emitted from the light source is received at a light path between the receiving surface and, the emission surface

~~is not interrupted and wherein during a collision, light emitted from the light source is not received at a light path between the receiving surface and the emission surface is interrupted.~~

25. (Currently Amended) The apparatus according to claim 10, wherein the apparatus is configured so that, during a non-collision, light emitted from the light source is received at a light path between the receiving surface and, the emission surface is not interrupted and wherein during a collision, light emitted from the light source is not received at a light path between the receiving surface and the emission surface is interrupted.

26. (Currently Amended) ~~[[The]]~~ A high-precision measurement machine according to claim 18, comprising:

a housing part to support an optical component,
an impact detection element movably connected to the housing part,
a light source coupled to the housing part defining an emission surface, and
a receiving element coupled to the impact detection element defining a receiving surface arranged opposite the emission surface of the light source,

wherein the machine is configured so that, during a non-collision, light emitted from the light source is received at a light path between the receiving surface and, the emission surface is not interrupted and wherein during a collision, light emitted from the light source is not received at a light path between the receiving surface and the emission surface is interrupted.

27. (New) An apparatus for protecting a protruding component comprising:
a housing part to which the protruding component is connected,
an impact detection element movably connected to the housing part,
a light source coupled to the impact detection element defining an emission surface,
and
a receiving element coupled to the housing part defining a receiving surface arranged opposite the emission surface of the light source.

28. (New) The apparatus according to claim 27, wherein the receiving surface and emission surface are of substantially the same size.

29. (New) The apparatus according to claim 27, wherein the impact detection element surrounds at least partially the protruding component to be protected.

30. (New) The apparatus according to claim 27, wherein the light source comprises at least one light-guiding fiber, and the emission surface is defined by the end of the light-guiding fiber.

31. (New) The apparatus according to claim 27, further comprising an intensity sensor, which is associated with the receiving surface.

32. (New) The apparatus according to claim 27, wherein the receiving surface is a reflective surface that directs the light emitted from the emission surface onto at least one further light-guiding fiber, connected to an intensity sensor, whose end defines a further receiving surface.

33. (New) The apparatus according to claim 27, wherein the impact detection element is movably connected to the housing part via at least one elastically bendable rod.

34. (New) The apparatus according to claim 31, wherein the intensity sensor generates an electrical signal corresponding to the power level of the light striking the receiving surface, which serves for open-loop or closed-loop control or monitoring of a movement operation.

35. (New) The apparatus according to claim 27, wherein a light path between the receiving surface and the emission surface is smaller than a cross section of the emission surface.

36. (New) A contact sensor, comprising:

an impact detection element movably connected to a housing part,
a light source coupled to the impact detection element defining an emission surface,
and
a receiving element coupled to the housing part defining a receiving surface arranged
opposite the emission surface of the light source,

wherein the sensor is configured so that, during a non-collision, light emitted from the
light source is received at the receiving surface and, during a collision, light emitted from the
light source is not received at the receiving surface.

37. (New) The apparatus according to claim 27, wherein the apparatus is
configured so that, during a non-collision, light emitted from the light source is received at
the receiving surface and, during a collision, light emitted from the light source is not
received at the receiving surface.

38. (New) A high-precision measurement machine, comprising:
a housing part to support an optical component,
an impact detection element movably connected to the housing part,
a light source coupled to the impact detection element defining an emission surface,
and
a receiving element coupled to the housing part defining a receiving surface arranged
opposite the emission surface of the light source,
wherein the machine is configured so that, during a non-collision, light emitted from
the light source is received at the receiving surface and, during a collision, light emitted from
the light source is not received at the receiving surface.